

REVIEWS

Editor's Note: These two books appeared in press about the same time, and they quickly caught the eyes of the students in the Plant Taxonomy class at San Francisco State University. It was too late to have our bookstore order them for the class. I was therefore impressed when a fair number of students went out and ordered these books on their own, in addition to the required books for the course. Accordingly, the following reviews are a consensus and are based on our using them this spring.

Plants of the San Francisco Bay Region. Mendocino to Monterey. By EUGENE N. KOZLOFF and LINDA BEIDLEMAN. 1994. Sagen Press, Pacific Grove, CA. 332 pages plus 110 plates. Softcover \$35.00. ISBN 0-9643756-0-5.

The enormous diversity of plants in the California flora makes the task of identifying species daunting to many. Despite the value of such inclusive works as *The Jepson Manual of California Plants*, *Munz' Flora of California*, and *Abrams' Illustrated Flora of the Pacific Northwest*, users are often frustrated by having to wade through pages of keys and descriptions before being able to make an identification. On the other hand, local floras, dealing only with plant species of more restricted regions, are logical solutions to the needs of persons wishing to identify plants from smaller areas. Local floras are not new to California—many have been published and have served the botanical community and lay audience for over 100 years. The most recent volume, composed by Eugene Kozloff and Linda Beidleman, focuses on the San Francisco Bay region, an area having one of the higher concentrations of botanists in the country.

The book begins with a six-page introduction to such botanical basics as plant names, major plant groups, how to use a dichotomous key, conservation, and growing native plants. Following, there is a short chapter on the plant communities of the region. Most of the book consists of keys to the plant species of the Bay Area. The keys are not simply extracts of previously written keys, but rather are assembled to make identification of the Bay Area species as easy as possible. They appear to work well. The keys also follow the example of the Jepson Manual in having leads parallel in construction—a big plus.

There is an selection of high quality photographs representing a fair number of natives. Curiously, they are placed following page 74, near to but not in front of the keys. Perusing photos of Polemoniaceae we noticed several 4- and 6-merous flowers in the photos. Those who study this family know that rare deviations in merosity are not uncommon; however, *Collomia grandiflora* (plate 41) looks a bit like a member of the Rubiaceae in the photo. A bit of discussion explaining the not uncommon deviation from expected flower part number would have been helpful here. Following the photos is a section of generally good quality line drawings. Not every species in the book is illustrated, but the careful user will be able to combine the keys and illustrations to help identify plants.

Our complaints are few, and can be divided into matters technical and matters philosophical. As to the former, what strikes the reader right off is the extremely light type face used throughout the book. It appears as if the final copy was typed on a typewriter in dire need of a new ribbon. This is probably the most distracting aspect of the book. Another concern is the weight of the book—it's heavier than you'd expect. The pages are glossy and heavy weight. And the binding looks suspiciously unfieldworthy, although time will tell whether this is a real concern. Hopefully, next editions will have a typeface that matches the quality of the photographs and drawings.

As to matters of nomenclatural philosophy, we have a problem with forcing com-

mon names on species, either by translating the Latin name into English (e.g., Variedleaf *Collomia* for *Collomia heterophylla*) or imposing common names on species based on who knows what criterion (e.g., Common *Linanthus* for *Linanthus parviflorus*). Further, the practice of trying to use common names can be confusing, as when we read that the common name for *Allophyllum divaricatum* is "Straggling Gilia." Keyers have enough trouble distinguishing *Allophyllum* from *Gilia* without common names adding to the problem. We suggest using only those common names that are unambiguous and in very common use.

Overall the effort merits applause. It is a well-needed augment to the new-ish Jepson Manual, and we would advise anyone interested in the plants of the Bay Area to get a copy. Its price is reasonable, and Sagen Press will sell it directly by mail. We would like to see similar efforts written for other regions in the state for which there is no local flora.

Guide to Flowering Plant Families. By WENDY B. ZOMLEFER. 1994. The University of North Carolina Press, Chapel Hill. 430 pages. Softcover \$29.95. ISBN 0-8078-4470-5.

This is a book for which plant taxonomy students and professors have been waiting. Wendy Zomlefer has produced a text that describes major flowering plant families encountered in North America, illustrates the families in detail, and on occasion discusses problematical groups and their recent systematic treatments. She follows the system of angiosperm classification delineated by Robert Thorne, whose family circumscriptions sometimes differ a bit from those of other authors (e.g., Araliaceae are included in the Apiaceae, Asclepiadaceae are included in the Apocynaceae, *Sambucus* and *Viburnum* are placed in the Adoxaceae).

The book treats in detail 115 families. Each begins with a diagnosis that stresses the features of the North American species. Following the diagnosis is a "Family Characterization" that summarizes family features, including chemical and anatomical characters. This is followed by the number of genera and species in the family, a distributional range statement, a list of major genera and U.S./Canadian representatives. Economically important members of the family are also mentioned. Each treatment ends with a commentary on the family that may deal with topics such as reproductive and pollination biology, taxonomic treatments within the family, or structures peculiar to the family. Short bibliographies that follow each family are recent.

Zomlefer includes a lucid discussion of phylogenetic systematics (=cladistics), but rather than providing a simple (or simplified) lesson that fails to convince the reader of the advantages of a cladistic approach to taxonomy, she provides a discussion of the "monocot vs dicot dilemma" from a cladistic perspective. She takes evidence from recent research that suggests that the dicots may not be monophyletic, and uses this paradigm to teach the fundamentals of phylogenetic systematics. The result is a concise, non-threatening, readable presentation of the topic that all botanists should read.

It's hard to imagine a book where a chapter on principles of cladistics is followed by one on observing, dissecting, and drawing flowering plants—but here it is. Zomlefer does not simply grace the reader with her drawing talent—she explains how to see plants and how to draw them. Zomlefer is an accomplished technical illustrator, and her drawings of the families in the book help illustrate important features. While the line drawings are not as showy as the colored figures in Heywood's *Flowering Plants of the World*, their precision will likely render them of greater use to readers.

Botanists who are interested in the latest taxonomic research, particularly in phylogenetic relationships among families, will appreciate Zomlefer's careful, articulate discussions of problematical family relationships. For example, her treatment of the